

HISTORICAL PRESENCE OF THE BURROWING OWL IN MEXICO

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The Burrowing Owl (*Speotyto cunicularia*) has been listed in the Blue List since 1972 in the U.S.A. and classified as threatened in Canada. Northern banded Burrowing Owls have been recovered in Mexico and Central America. However, due to the scarce knowledge about the breeding and non-breeding distribution in Mexico, I compiled data on 279 Burrowing Owls from twenty-seven museums. Historical Burrowing Owl collects date since the 1840s through 1980s. Most of the individuals were collected in the decade of the 1900s. Sixty-three percent of collects were in the non-breeding (wintering) season. In Mexico, the Burrowing Owl has a wide distribution. It is located in 28 of 32 Mexican states. Baja Peninsula has provided the most information. The Southeastern region stands out for lack of information. *S. cunicularia* is the third most common owl collected in the country. The high number of individuals during the non-breeding season suggests an increase of Burrowing Owl populations. Possibilities may indicate the arrival of North American migrants at winter. I suggest finding breeding and non-breeding preferred and/or priority areas, banding individuals to define migration routes, and establishing the effects of human activities to determine if this impact affects the species' decline.

OPPORTUNITIES AT THE ALASKA RAPTOR REHABILITATION CENTER

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The Alaska Raptor Rehabilitation Center is located in Sitka, Alaska and was founded in 1980. Its three-part mission includes treatment of injured Alaskan birds of prey, education of the public concerning raptor ecology and medicine, and the support of research pertaining to the ecology and medical treatment of raptors. Although the center's beginnings were extremely modest, now it has grown to accommodate thousands of visitors a year and treats more than 50 bald eagles, its primary patients, each year as well as many other birds of prey and non-raptorial species. The staff at ARRC know that, although their efforts to save a few birds will not be significant in the overall population of raptors directly, the knowledge gained and shared from working with the birds will slowly awaken people to their significance and the magnitude of the impact that civilization has upon them. Being more aware of these elements, many of the preventable, man-caused injuries ARRC treats will diminish. ARRC invites others to share in its mission through volunteering, donation, and membership, and a special invitation is extended to raptor

organizations and researchers to participate in ongoing research opportunities at ARRC.

USE OF RANDOM AMPLIFICATION OF POLYMORPHIC DNA (RAPD) IN THE ANALYSIS OF METAPOPULATION STRUCTURE IN *STRIX* OWLS

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Random amplification of polymorphic DNA (RAPD) is a comparatively new technique for detecting diversity in the nuclear genome. Relative to many other molecular genetic techniques, it is both time and cost effective. We are currently using RAPD to examine the degree to which small breeding populations of both Spotted Owls (*Strix occidentalis*) and Great Gray Owls (*S. nebulosa*) are genetically distinct from neighboring populations. We present here several examples of the type of results yielded by the RAPD technique. These results will enable us to construct population models that will in turn lead to a better understanding of the impact of various management strategies on these owl populations. In addition, we are exploring the applicability of the RAPD technique to questions of the phylogeny of the *Strix* complex and other closely related species.

ARTIFICIAL STRUCTURES FOR NESTING FERRUGINOUS HAWKS IN TWO COUNTIES OF WASHINGTON STATE

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Approximately sixty (60) nesting territories of Ferruginous hawks (*Buteo regalis*) are found in eastern Washington. Washington is on the margin of this species range, and often human activities in these areas have adversely impacted nest productivity. Furthermore, availability of suitable nest location is a problem for this species. In a cooperative effort to manage these populations in Lincoln and Franklin counties, the Bureau of Land Management and the Washington State Department of Wildlife have constructed and placed two types of nesting structures in an effort to help bolster productivity. One nest structure is circular metal, which is bolted to a basalt cliff. This device has been used to replace nests which have fallen from the cliff or on cliffs where nesting shelves are non-existent. The second structure is used in conjunction with juniper and other tree nest locations. Construction of these nest structures provides nesting pairs with an option other than a ground nest, which may be vulnerable to predation

USE OF GPS AND GIS TO STUDY BALD EAGLES AT AMERICAN FALLS RESERVOIR, IDAHO